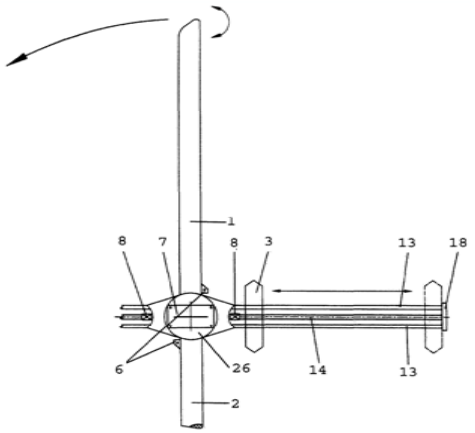
Features and Applications

- quick takeoff and short runways are possible
- reduced start and landing areas
- vertical takeoff and landing
- security booster for critical situations
- high kinetic energy supply without reaction torque to the aircraft airframe
- Hyperdrive-Systems can power up gyrocopters, aircrafts and rc-models



Principle: Pulling equal masses towards the rotation center after or during pre rotation phase on ground

tecnet serves as a link between research and industry.
Our services render great benefit to research centers and universities on the one hand and to the business world on the other.

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technology offer

Gyrocopter-Hyperdrive

Boosting up main rotor speed

Hyperdrive technology generates rotation energy to the main rotor without negative reaction force to the airframe.

This gives the opportunity for vertical takeoffs and landings.

Key benefits

- very high pre-rotation speeds on ground are now possible
- no reaction torque to the airframe on ground and in the air
- low realization costs
- helicopter start and landing zones become useable also for gyrocopters
- programmable speed variation during by changing the radial distance of weights

Opportunity

We are looking for development partners and enabler of the Gyrocopter-Hyperdrive. It is an IP-protected innovation which uses the radial mass transport at a rotation system. It is especially thought for gyrocopters in order to increase the rotations speed without bringing a reaction torque to the airframe.

The patents are available for licensing.

Background

The effect used is known as the pirouette-principle (simply momentum conservation law).

Gyrocopters have a main rotor system, which is passively driven by airstream.

It is state of the art to pre- rotate the main rotor with additional energy before takeoff. But this action produces negative torque action on ground, if the rotation is derived from a drive situated at the aircraft vehicle!

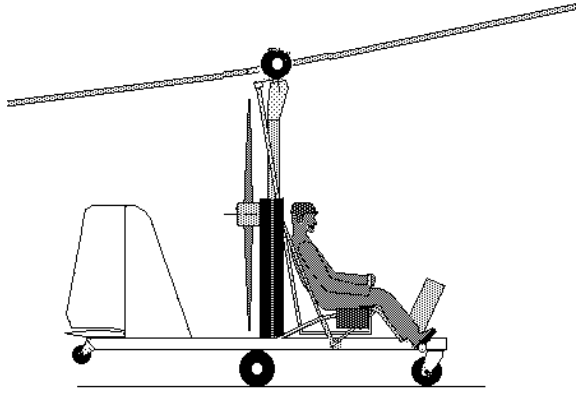
The introduced new Gyrocopter-Hyperdrive prevents this.

The masses on the side arms are movably positioned in a controlled distance to the rotation center. Then additional energy is intentionally needed just to pull the weights closer to the rotation center-e.g. with ropes or spindle drive.

Radial movement of the equal weights does not produce dangerous torque to the airframe, but it enormously increases the rotational speed of the main rotor during takeoff on ground and during flight.

So vertically takeoff is enabled comparable to helicopters.

New features



The new Gyrocopter-Hyperdrive has a dragging motor gear combination advantageously placed in the main rotor head. The drive propeller behind the pilot seat is for the horizontal flight but still used to pre-rotate the main rotor on ground.

The pilot may control the distance position of the rotating weights.

Intellectual Property

Austrian Patent is granted.
(AT506.694)

International patents are pending.
(WO2010/006354)